

What is claimed is:

1. A driving unit of a welding equipment provided with a pressure application shaft that is driven by a motor comprising:

a rotary shaft of the motor formed of a hollow shaft;

5 a screw shaft fixed inside the rotary shaft;

a nut being provided integrally with or substantially integrally with the pressure application shaft, said nut being screwed with a screw provided on the screw shaft, wherein the rotary shaft of the motor is substantially coaxially positioned with the screw shaft;

10 wherein outer diameters of the nut and pressure application shaft are respectively smaller than an inner diameter of the rotary shaft to form a direct moving guide part; and

15 wherein the direct moving guide part is movable on an inner periphery surface of the rotary shaft and a rotary force of the rotary shaft of the motor is converted into a reciprocating motion.

2. The driving unit of a welding equipment according to Claim 1, wherein the pressure application shaft is formed of a hollow shaft, and the nut is fixed to an end of the pressure application shaft so that the nut provided substantially integrally with the pressure application shaft.

20 3. The driving unit of a welding equipment according to Claim 1, wherein the pressure application shaft is formed of a hollow shaft, and a screw is formed on the inner periphery of the pressure application shaft at the end of thereof so that the nut is provided integrally with the pressure application shaft .

25 4. The driving unit of a welding equipment according to Claim 1, wherein the pressure application shaft is formed of a hollow shaft and the nut is fixed to an inner periphery of the pressure application shaft at the end of thereof so that the nut provided substantially integrally with the pressure application shaft.

5. The driving unit of a welding equipment according to Claim 1, wherein a bearing of the direct moving guide part is disposed on a front wall of the motor and the direct moving guide part is slidable on the inner surface of the bearing.

6. The driving unit of a welding equipment according to Claim 1, wherein
5 the screw shaft provided substantially integrally with the rotary shaft of the motor by fixing the screw shaft to the rotary shaft of the motor utilizing friction force.

7. The driving unit of a welding equipment according to Claim 1, further comprising a machining part formed on the end of the screw shaft opposite to the output side of the rotary shaft of the motor on which a manually operating handle is
10 mounted.

8. The driving unit of a welding equipment according to Claim 1, further comprising a driven part that is provided on the screw shaft and positioned between the rear of a body of the motor and the front of a position detector for transmitting the torque of the motor and a manually operating driving part that is positioned
15 eccentrically from the screw shaft for transmitting a turning torque to the driven part.

9. The driving unit of a welding equipment according to Claim 8, wherein the driven part is formed of a gear, and further comprising a machining part that is manually operable and is formed in a gear of the driving part connected to the gear
20 of the driven part directly or by way of a serrated toothed belt.

10. The driving unit of a welding equipment according to Claim 8, wherein the driven part is formed of a gear, the driving part meshing with the gear of the driven part is formed of a gear, and further comprising a standby unit formed of an elastic body for displacing the position of the gear of the driving part, wherein the
25 gear of the driving part is rendered standby when the motor is operated by the standby unit.

11. The driving unit of a welding equipment according to Claim 8, wherein

the driven part is formed of a gear, the driving part meshing with the gear of the driven part is formed of a gear, and further comprising a guide shaft provided integrally with the gear of the driving part, wherein the gear of the driving can be taken out from the motor by the guide shaft when the motor operates.